

On new and little known Lasiocampidae from Armenia, USSR

(Lep. Lasiocampidae)

by

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Abstract

Lasiocampa grandis ROGENHOFER is for the first time reliably mentioned for Armenia and the whole of the USSR. *Eriogaster daralagesis* from Armenia, Daralagez, and *Streblote solitaria* from the Ararat lowlands, Armenia, are described.

The Lasiocampidae of Armenia are poorly known. 11 species had been noted from this mountain republic before our investigations. 4 species were reported by SHENGELIA (1941) and 7 species were added by GEVORKJAN (1986). We treated collection funds of the Zoological Institute of the USSR Academy of Sciences (Leningrad), Zoological Museums of Moscow and Kiev State University, and, as a result, increased the number of species of Lasiocampid moths for the territory of Armenia up to 22 species. Below we examine one new species for Armenia and the USSR and describe two species new to science.

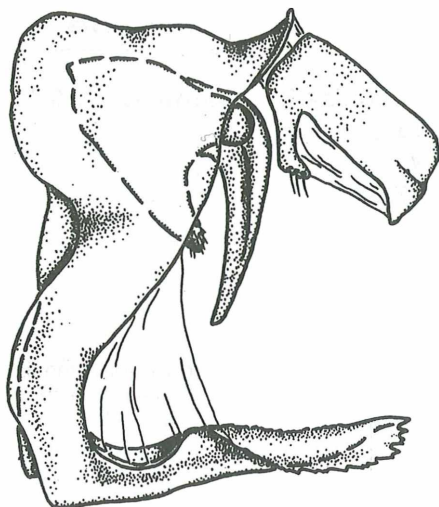
Lasiocampa grandis ROGENHOFER, 1891

Male: Expanse 57 mm, length of forewing 30 mm. Thorax cream-yellow, abdomen with bunches of reddish hairs. Ground colour of forewing cream-yellow, postmedial zone sandy rosé. Antemedial line badly expressed, postmedial brown with obvious distal yellow border. Discocellular spot white, small round hem with narrow stripe of brown scales. Cilia brownish. Hindwing cream-rosé; cilia of a sandy colour.

Male genitalia (fig. 1): Tegumen wide; socii rudimentary, accrete with tegumen. Vinculum large, ladle-shaped, its distal processes fine and irregular jagged and bending outside in the roll up plate. Cucullus stylet-shaped and smooth; sacculus present as triangular structure with fine granulate surface and thickly haired. Aedoeagus long, its proximal end provided by dorsal crest. Vesica without cornuti; juxta strongly adhered to aedoeagus.

The female has not been studied. We found two well preserved males (both of f. *sapiens* STAUDINGER: ground colour of forewing considerably lighter than in the typical form) in the collection of the Zoological Institute of Leningrad.

Range: Armenia, Ararat lowland, 19.VIII. and 21.VIII.1955, CH. ARUTUNJAN. For the first time recorded for Armenia and for the first time reliable for the USSR. Before *L. grandis* was noted for Transcaucasia by WATKINS & BUXTON (1923); the specimen is kept in the British Museum. Later WILTSHIRE (1957) suggested, that it is *L. piontkovskii* SHELJUZHKO, described also from Transcaucasia. We did not work with this specimen. DARICHEVA &



DUBATOLOV (1990) mention *L. grandis* from West Kopetdagh (Turkmenian SSR) and refer to the male kept in the collection of A. ZVETAJEV (Zoological Museum of Moscow University). We have studied this specimen and confirmed that it is *L. trifolii*. The presence of *L. grandis* in Turkmenia is improbable and seems to be a mistake. This species is known from the Balkans, Turkey and Asia Minor (DE FREINA & WITT, 1987).

Fig. 1: *Lasiocampa grandis* ROGENHOFER, male genitalia, side view, aedeagus removed.

Eriogaster daralagesis spec. nov.

Male: Expanse 34 mm, length of forewing 14 mm. Head, thorax and abdomen golden yellow. Antennae bipectinate, brownish red. Both wings (fig. 2a) sandy yellow with golden yellow cilia. Discocellular spot and antemedial line are absent. Postmedial line hardly expressed, strong, vague, reddish brown. Hindwing with strong medial reddish brown, hardly expressed line. Venation of the left and right wings are different owing to dichotomy of M1 and Cu1 and absence of M2 in the right forewing and dichotomy of Cu1 in the right hindwing. Venation of left side wings are typical for the genus: in the forewing common branches R2+3 and R4+5, M1 free, foundation of M1 close to that of M2. In the hindwing Sc makes an anastomose with R, foundation of M2 close to that of M3.

Male genitalia (fig. 3a-c): Tegumen narrow, ribbon-shaped, accrete with vinculum. Socii large, stretching along tegumen, thickly haired, with the tops rounded. Vinculum triangular in the side-view and hexagonal in ventral view. Central part of vinculum present as a cone and bordered laterally. Saccus plane and directed proximally about 80° to vinculum. Valvae cucullus short, cone-shaped, accrete with triangular sacculus, which is thickly haired. Aedeagus simple, without lateral and dorsal crests on the proximal end, vesica without cornuti (fig. 3b). Juxta strongly adhered to aedeagus.

The female is unknown.

Remarks: In the external characters this species is similar to *E. amygdali* WILTSHIRE, distributed in Iran and Afghanistan, but the wings of this species are light brown, forewings with white discocellular spot and bending brown postmedial line; hindwings without bands or only medial line yellowish. From the similarity of external characters *E. daralagesis* spec. nov. is considered to be closely related to *E. pfeifferi* DANIEL, distributed in Turkey, but the forewing of *E. pfeifferi* (fig. 2b) has a poorly expressed white discocellular spot and the bending of the postmedial line is almost parallel to external border of the wing. Genitalia of

both species differ well from genitalia of *E. daralagesis* spec. nov. in triangular vinculum in ventral view (hexagonal in *E. daralagesis*) and in the position of the saccus partially closed to the vinculum cone (fig. 3d). *E. daralagesis* spec. nov. has the saccus directed at 80° to the vinculum abd does not close the vinvulum cone at all.

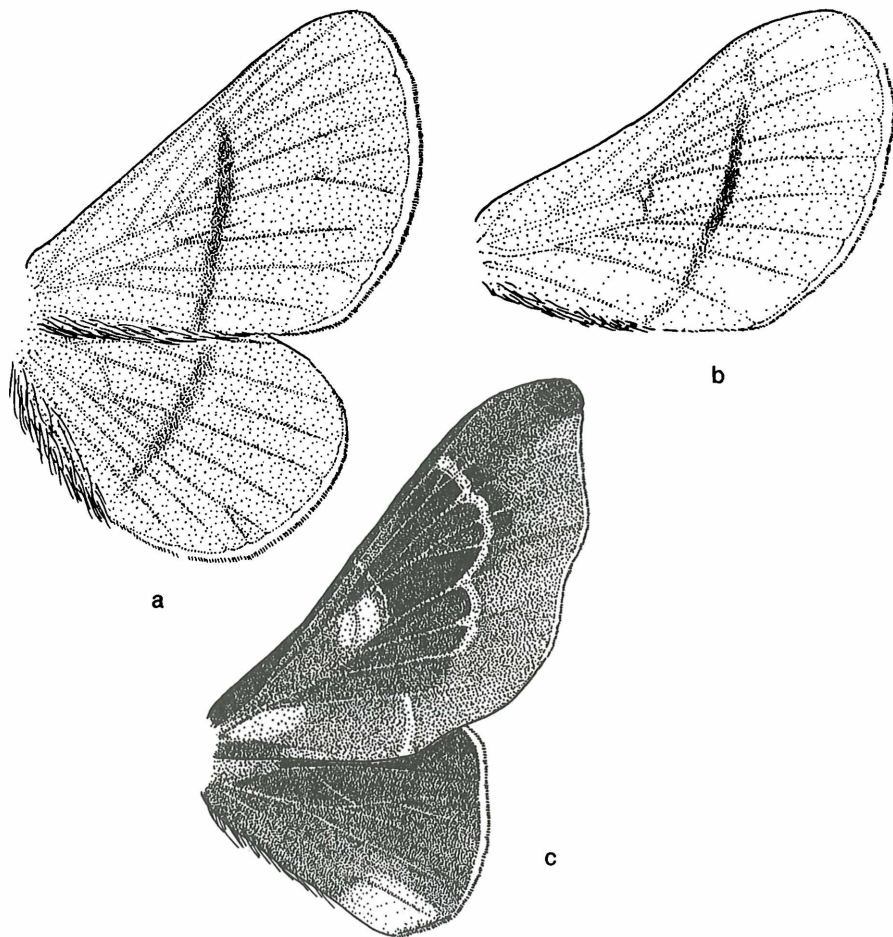


Fig. 2: Wings of Lasiocampidae: a) *Eriogaster daralagesis* spec. nov., b) *Eriogaster pfeifferi* DANIEL, c) *Streblote solitaria* spec. nov.

Range: Armenia, Daralagez.

Holotype ♂, labelled: "Caucasus, Armenia, Daralagez, 20.IX.1963, coll. E. MILANOVSKII", "*rimicola* HB.", "*phillipsi* BARTEL", "gen. praep. N 15988, ♂, *E. daralagesis*, sp. n., V. ZOLO-

TUCHIN det." Last label red, standard size with the inscription "*Eriogaster daralagesis* ZOLOTUCHIN, sp. n., Daralagez. Holotypus. Coll. Zool. Mus. Leningrad".

The costal part of the left forewing needs glueing, the right antenna is absent. The holotype is kept in the Zoological Museum of the USSR Academy of Sciences, Leningrad.

The biology is unknown.

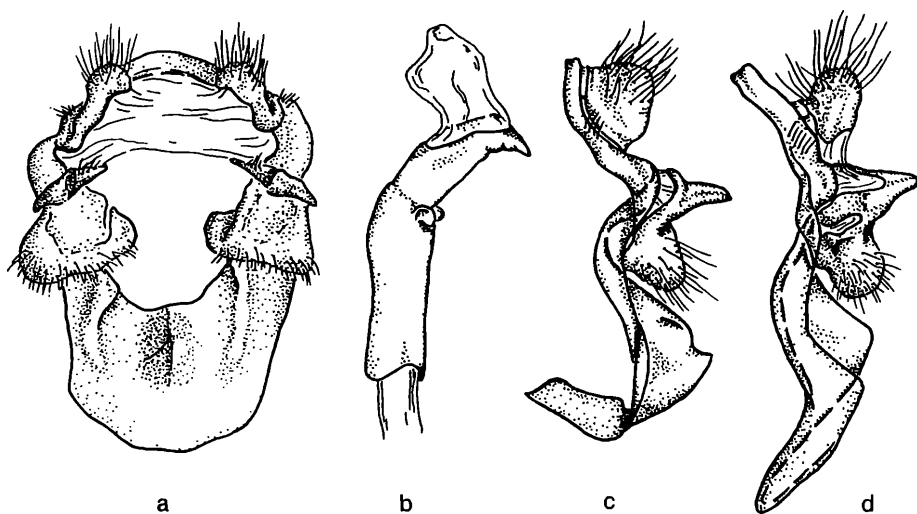


Fig. 3: *Eriogaster* spp., male genitalia: 3a-c: *Eriogaster daralagesis* spec. nov., a) ventral view, b) aedeagus, c) side view. 3d: *Eriogaster pfeifferi* DANIEL, side view.

Streblote solitaria spec. nov.

Male: Expanse 38 mm, length of forewing 18.5 mm. Head yellowish brown. Palpi brown. Antennae bipectinate, brownish. Patagia and thorax yellowish, tegal dark brown. Forewing elongated (fig. 2c) with small cut on the top of M3. Ground colour of forewing dark brown, postmedial area lighter. Discocellular spot yellow, round. Antemedial line light, hardly expressed, postmedial whitish and complex curved. Basal part of forewing with longitudinal yellowish dab under the central cellula. Cilia yellowish. Hindwing dark brown with yellowish cilia and well distinguished quadrangular yellow spot in the tornal angle. The Venation is typical for the genus. Legs reddish brown. Abdomen yellowish brown with the fascicle of long brown scales on the top and short bundles of brown scales on the sides of the anus.

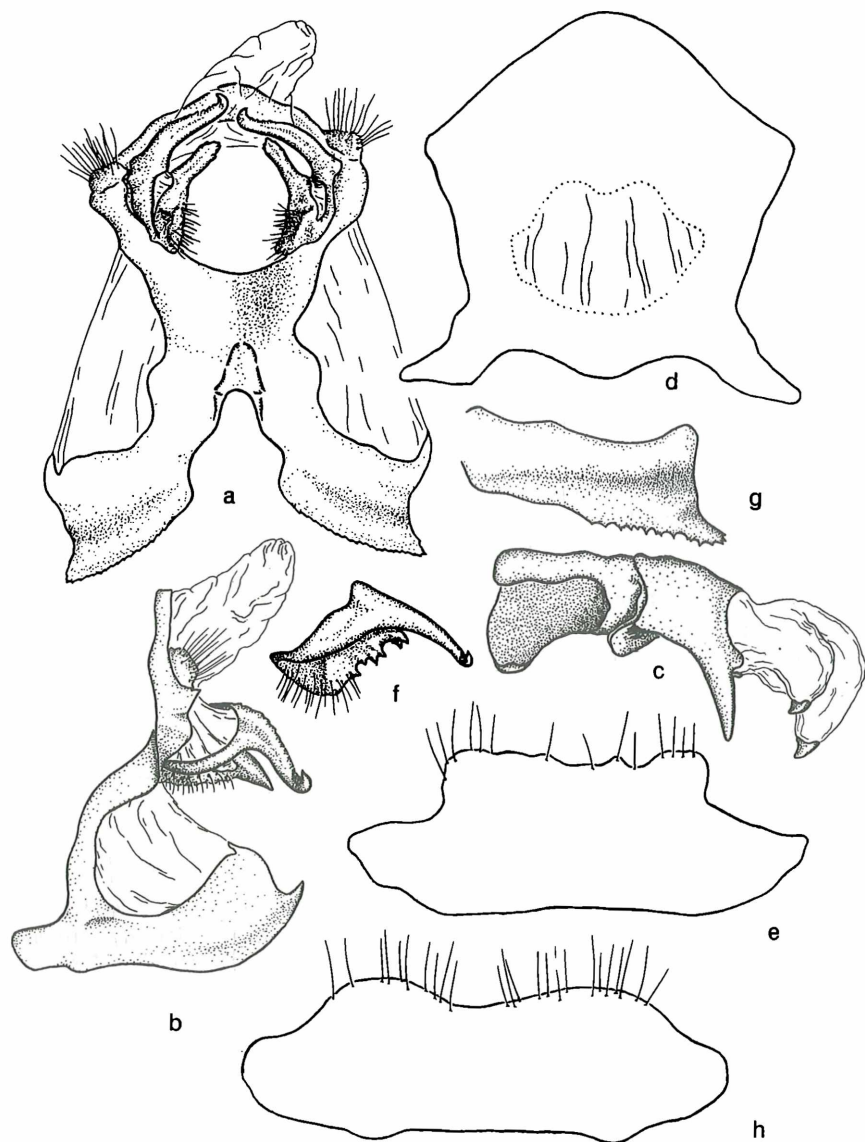


Fig. 4: *Streblote* spp., male genitalia: 4a-e: *Streblote solitaria* spec. nov., a) ventral view, b) side view, c) aedoeagus, d) 8th tergite, e) 8th sternite. 4f-h: *Streblote alpherakyi* CHRISTOPH, f) valvae, g) distal process of vinculum, h) 8th sternite.

Male genitalia (fig. 4a-e): Tegumen very narrow, band-shaped and adhered to vinculum. Socii small, thickly haired. Vinculum plane, distal processes of vinculum large, fine and regular jagged on the inner edge. Saccus in side view quadrangular. Valvae: cucullus narrow, stylet-shaped, curved outside and fine jagged on the surface. Sacculus with pointed top and triangular base. Aedoeagus of the typical form within *Streblote*, heavily spreaded proximally, with drowing top and two large conical cornuti on the apex of the bifurcated vesica. 8th tergite and 8th sternite of the abdomen are figured (fig. 4d, e).

The female is unknown.

Remarks: The new species differs well from all *Streblote* of the USSR in the colour and especially in hindwing pattern. In external characters *Streblote solitaria* spec. nov. is similar only to *S. alpherakyi* CHRISTOPH, distributed in Iran and Afghanistan. We have studied the type of *S. alpherakyi* CHR. kept in the collection of the Zoological Museum of Humboldt University, Berlin. It differs significantly from *S. solitaria* spec. nov. in the following ways: discocellular spot of the forewing dark, median lines white, antemedial line well developed. Ternal angle of the hindwing with weak lightness, distal edge of 8th sternite is wavy rounded off (fig. 4h). Inner edge of distal processes of vinculum is irregular jagged, sacculus with dorsal comb of large chitine toothes (fig. 4g). In *S. solitaria* spec. nov.: discocellular spot yellow, postmedial line whitish, antemedial line hardly expressed. Ternal angle of hindwing with large quadrangular yellow spot, distal edge of 8th sternite with rectangular projection (fig. 4e). Inner edge of distal processes of vinculum fine and regular jagged, saccus without large chitine toothes.

Range: Armenia, Ararat lowland. This specimen is the first representative of the genus *Streblote* in Transcaucasia.

Holotype ♂, labelled: "Armenia, (Ararat lowland), 3.VIII.1955, CH. ARATUNJAN", "gen. praep. N. 16003, ♂, *Streblote solitaria*, sp. n., V. ZOLOTUCHIN det." Third label red, standard size with the inscription: Holotypus. *Streblote solitaria* ZOLOTUCHIN, sp. n., ♂, Armenia. Coll. Zool. Mus. Leningrad"

The holotype is kept in the Zoological Museum of The USSR Academy of Sciences, Leningrad.

The biology is unknown.

Summary: *Lasiocampa grandis* ROGENHOFER has for the first time been recorded in Armenia and also for the USSR. *Eriogaster daralagesis* spec. nov. (type locality: Armenia, Daralagez), closely related to irano-afghanian *E. amygdali* WILTSHIRE and turkish *E. pfeifferi* DANIEL are described. *Streblote solitaria* spec. nov. (type locality: Armenia, Ararat lowland), closely related to irano-afghanian *S. alpherakyi* CHRISTOPH, is described, also. The types are kept in the collection of the Zoological Museum of the Academy of Sciences of the USSR (Leningrad).

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References

- DARICHEVA, M. A. & V. V. DUBATOLOV (1990): On the fauna and ecology of Lasiocampidae (Lepidoptera) of the Turkmenian SSR. - *Rev. Acad. Sci. Turk. SSR* 1990(2):27-33 (in Russian).
- FREINA, J. DE & T. WITT (1987): Die Bombyces und Sphinges der Westpalaearktis. Bd. 1. - München.
- GEVORKJAN, M. R. (1986): Fauna of Lepidoptera Heterocera of riv. Razdan canyons and its tributary Marmaryk (Armen. SSR). - *Entom. Rev.* 65:683-690 (in Russian).
- SHENGELIA, E. S. (1941): On the range of silk-moths in Georgia and in the adjacent republics. - *Tr. Zool. sect. Acad. Sci. USSR, Georgia branch* 3:117-127 (in Russian).
- WATKINS, H. T. G. & P. A. BUXTON (1923): Moths of Mesopotamia and N.W.Persia. Part 2. Sphinges & Bombyces. - *Journal of the Bombay Natural History Society* 28:184-186.
- WILTSHIRE, E. P. (1941): New Lepidoptera from S.W.Iran. - *Journal of the Bombay Natural History Society* 42:472-477.
- WILTSHIRE, E. P. (1957): The Lepidoptera of Iraq. - London.

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